

Art Unit: 2600

CLMPTO 08/05/04 JW

Amend Claims 2,3,5,6,10,11,14,16,17,19,

1 1. A system comprising:
2 a light source emitting light at a selectively
3 variable output power to transmit data at a given data
4 rate; and
5 a monitor diode positioned to receive at least a
6 portion of the emitted light, the monitor diode having a
7 bandwidth only partially overlapping a lower end of a data
8 transmission spectrum for the data rate.

2 (Currently Amended) The system according to claim 1, wherein the bandwidth of
the monitor diode is substantially less than or equal to one tenth of the data rate.

3 (Currently Amended) The system according to claim 1, wherein the bandwidth of
the monitor diode is less than or equal to less than or equal to and one twentieth of the data rate.

4 The system according to claim 1, wherein the
monitor diode functions as a low pass filter operating on
the light emitted by the light source.

5 (Currently Amended) The system according to claim 1, further comprising:
6 peak detectors with exponential decay detecting peak-to-peak amplitude of an output
7 signal for the monitor diode, wherein the peak-to-peak amplitude is directly representative of optical
8 modulation amplitude for the light source

9 (Currently Amended) The system according to claim 5, further comprising:
10 a controller employing the output signals from the peak detectors to control output
11 power, optical modulation amplitude or amplitude of the light source

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7. An optical subassembly including the system according to claim 6, the optical subassembly adapted for transmission of data over an optical transmission medium.

8. A computer including the optical subassembly according to claim 7, the computer further comprising:

a processor coupled to the controller; and

a network connection through the optical subassembly to the optical transmission medium.

7. An optical subassembly including the system according to claim 6, the optical subassembly adapted for transmission of data over an optical transmission medium.

8. A computer including the optical subassembly according to claim 7, the computer further comprising:

a processor coupled to the controller; and

a network connection through the optical subassembly to the optical transmission medium.

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9. A method comprising:

emitting light from a light source at a selectively variable output power to transmit data at a given data rate; and

receiving at least a portion of the emitted light at a monitor diode, the monitor diode having a bandwidth only partially overlapping a lower end of a data transmission spectrum for the data rate.

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10. (Currently Amended) The method according to claim 9, wherein the bandwidth of the monitor diode is substantially less than or equal to one-tenth of the data rate

11. (Currently Amended) The method according to claim 9, wherein the bandwidth of the monitor diode is less than or equal to between one-tenth and one-fortieth of the data rate

12. The method according to claim 9, further comprising:

low pass filtering the light emitted by the light source using the monitor diode.

13. The method according to claim 9, further comprising:

detecting peak-to-peak amplitude of an output signal for the monitor diode, wherein the peak-to-peak amplitude is directly representative of optical modulation amplitude for the light source.

14. (Currently Amended) The method according to claim 13, further comprising:
employing the peak-to-peak amplitude for the output signal for the monitor diodes to control output power from optical modulator amplitude or extinction ratio of the light source.

15. A system comprising:
a signal source emitting a high frequency signal to transmit data at a given data rate; and
a monitor device receiving at least a portion of the emitted signal, the monitor device having a bandwidth only partially overlapping a lower end of a data transmission spectrum for the data rate.

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16. (Currently Amended) The system according to claim 5, wherein the bandwidth of the monitor device is substantially less than or equal to one-tenth of the data rate.

17. (Currently Amended) The system according to claim 15, wherein the bandwidth of the monitor device is less than or equal to between one-tenth and one-fifth of the data rate.

18. The system according to claim 15, wherein the monitor device functions as a low pass filter operating on the high frequency signal emitted by the signal source.

19. (Currently Amended) The system according to claim 15, further comprising:
peak detectors with exponential decay delay, peak to peak amplitude of a modulated signal for the monitor device.

20. (Original) The system according to claim 19, wherein the signal source is a light source emitting light to transmit data. In this case, the monitor device is a low bandwidth detector device receiving at least a portion of the emitted light, and the peak to peak amplitude detected by the peak detectors is directly representative of optical modulation amplitude for the light source, the system further comprising:

a controller employing the output signals from the peak detectors as control output power from the light source.

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